## A NEW THALICTRUM FROM MOUNT RAINIER, WASHINGTON

## HAROLD ST. JOHN

Thalictrum rainierense sp. nov. Perennial, producing a slender offset at base; stem 30-48 cm. tall, glabrous, with 9-11 angles, the base short decumbent, clothed with brown marcescent leaf sheaths; basal or sub-basal leaves usually 1 at anthesis, the petiolar sheath 15-25 mm. long, membranous, brown, strongly

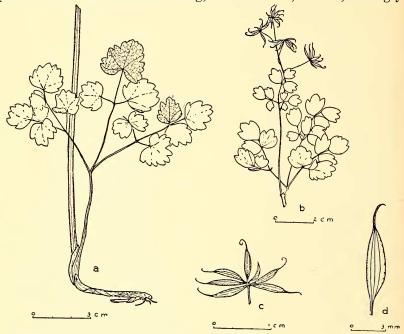


Fig. 1. a, stem and basal leaf; b, tip of stem and pistillate inflorescence; c, fruit; d, achene.

ribbed, auricled at tip; petiole 4–5 cm. long, glabrous; blades biternate, the petiolules 1–8 mm. long; leaflets 8–16 mm. long, thin chartaceous, above dark green and glabrous, beneath pale and glaucous and minutely capitate glandular puberulous, in outline suborbicular to broadly rhombic, the basal half entire, the apex 1–2-times lobed with broad ovate or rounded lobes; cauline leaves 3–4, the upper gradually reduced and shorter petioled; staminate plants not seen; pistillate plants with the inflorescence 25–45 mm. long, loosely cymose, 3–5-flowered, glabrous; bracts minute, suborbicular; pedicels 8–15 mm. long; calyx deciduous, not seen; the 5–12 achenes stipitate at base the outer ones on a stipe 0.2–1 mm. long, the inner on a stipe 1–1.8 mm. long, the

body 5.5-6 mm. long, 1.2-1.7 mm. wide, obliquely slender fusiform, with about 9 prominent, longitudinal ribs; stigma 0.4-3

mm. long. (Fig. 1.)

Perenne 30-48 cm. altum, caule glabro angulato, foliis biternatis, foliolis 8-16 mm. longis tenuiter chartaceis suborbicularibus vel late rhomboideis subtus glanduloso-puberulis apicibus lobatis, inflorescentibus foemineis cymosis 3-5-floriferis; acheniis fusiformibus stipitatis.

Washington: in meadows, altitude 6000 feet, Mount Rainier, August, 1895, C. V. Piper 2022 (type in State College of Washing-

ton Herbarium, Pullman).

No similar species is known in the region. The closest relative seems to be *T. stipitatum* Rydb. (not *T. stipitatum* Rose, 1903), a native of the mountains of Colorado. It has the herbage glabrous, and the achenes about 6 mm. long, and 2.5-3 mm. broad. *T. rainierense* has the leaflets capitate glandular puberulous beneath, and the achenes 5.5-6 mm. long, and 1.2-1.7 mm. wide.

University of Hawaii, Honolulu, February 7, 1937.

## SEEDLINGS FROM POLYEMBRYONIC SEEDS OF EUGENIA HOOKERI

## ARTHUR M. JOHNSON

In a previous paper¹ the writer described an unusual polyembryonic condition found in the seeds of Eugenia Hookeri, a common ornamental tree in the Los Angeles area. The question naturally followed as to whether or not seedlings would develop from these embryos and what form the seedlings would take. The present paper deals with the results obtained from seeds that were allowed to germinate in the soil under the parent tree. The species produces an abundant crop of fruit annually in this locality, and if the fallen fruits are allowed to remain on the ground a good crop of seedlings will usually spring up.

The seedlings herein described were dug up on May 26, 1934. The parent tree stands within a few feet of the north side of a dwelling, where, except during the midsummer season, no direct sunlight falls upon the ground beneath it. The soil is clayey and is always moist, and frequently wet, especially on days

when the adjacent lawn is watered.

At the time these seedlings were collected numerous other seedlings were growing in the ground beneath the parent tree. Many more seedlings were examined than the ones here described and figured. Seedlings have appeared annually in varying numbers since these were collected, though at the present

<sup>&</sup>lt;sup>1</sup> Johnson, A. M. Polyembryony in Eugenia Hookeri. Amer. Journ. Bot. 23: 83-88. 1936.